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U.S. DEPARTMENT OF LABOR

Form No. OSHA-20
May, 1971

MATERIAL SAFETY DATA SHEET *type 3*

SECTION I

MANUFACTURER'S NAME MONSANTO COMPANY		EMERGENCY TELEPHONE NO. (314) 694-1000
ADDRESS (Number, Street, City, State, and ZIP Code) 800 North Lindbergh Boulevard, St. Louis, Missouri 63166		
CHEMICAL NAME AND SYNONYMS		TRADE NAME AND SYNONYMS Skydrol[®] LD
CHEMICAL FAMILY Aircraft hydraulic fluid	FORMULA	

SECTION II HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FILLER		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES

Not hazardous by definitions in 29 CFR Section 1501.2
which pertains to this data sheet.

SECTION III PHYSICAL DATA

BOILING POINT (°F)	760mm (with deaer)	290°C	SPECIFIC GRAVITY (H ₂ O = 1)	25/25°C	0.899
VAPOR PRESSURE (mm Hg)	72°F.	6mm	PERCENT VOLATILE BY VOLUME (%)		N.A.
VAPOR DENSITY (AIR = 1)		N.A.	EVAPORATION RATE (H ₂ O = 1)		N.A.
SOLUBILITY IN WATER		Slight			
APPEARANCE AND ODOR	Clear purple liquid - Mild pleasant odor.				

SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Miles used)	COC	>330°F.	FLAMMABLE LIMITS	LEL	UEL
EXTINGUISHING MEDIA	Dry powder, CO ₂ , chemical foam, water fog.				
SPECIAL FIRE FIGHTING PROCEDURES					
UNUSUAL FIRE AND EXPLOSION HAZARDS					

Skydrol LD

SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE	Not established
EFFECTS OF OVEREXPOSURE	Impossible at ambient temperature. Excessive high temperature may produce irritating vapors.
EMERGENCY AND FIRST AID PROCEDURES	Unlikely to be necessary. Remove to fresh air.

SECTION VI REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	
INCOMPATIBILITY (Materials to avoid)		None	
HAZARDOUS DECOMPOSITION PRODUCTS		Smoke, soot, CO, CO ₂	
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Clean up like other non-hazardous liquids.
WASTE DISPOSAL METHOD
Same as motor oil.

SECTION VIII SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)		
Not necessary.		
VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL (General)	
	If excessively high temp.	
	Not necessary.	OTHER
PROTECTIVE GLOVES	Not necessary.	EYE PROTECTION
OTHER PROTECTIVE EQUIPMENT	None	Not necessary except as good industrial practice.

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Although no special precautions appear necessary, good industrial practice as to housekeeping, personal hygiene, avoidance of prolonged and repeated skin contact and splashing in eyes is indicated.
OTHER PRECAUTIONS

While the information and recommendations set forth herein are believed to be accurate as of the date hereof, MONSANTO COMPANY MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

HOH:EPW:WPB

3/7/72

TOXICITY INFORMATION ON: SKYDROL® LD (MCS 904)
fire resistant hydraulic fluid

TOXICITY

The rat acute oral LD₅₀ of SKYDROL LD is 1.44 grams/kilogram. When held in continuous 24-hour contact with rabbit skin, the dermal LD₅₀ was estimated to be between 3.16 grams/kilogram and 5.01 grams/kilogram. Thus, SKYDROL LD is considered to be slightly toxic by ingestion in single doses and by single dermal applications.

When 0.1 milliliter of undiluted SKYDROL LD was placed into the conjunctival sac of the rabbit eye, a slight degree of irritation resulted. The average maximum score, recorded 1 hour after treatment, was 6.0 on a scale of 110.0. All eyes had regained a normal appearance 24 hours after they were dosed.

A moderate degree of irritation resulted when SKYDROL LD was held in continuous 24-hour contact with intact rabbit skin. The average maximum score, recorded 24-hours after treatment, was 3.3 on a scale of 8.0.

Patch testing of SKYDROL LD in human volunteers produced changes compatible with the criteria of a fatiguing agent in six out of fifty subjects.

Rats were exposed to a stream of air which passed through SKYDROL LD and led directly into the experimental chamber. The animals survived both the 6-hour exposure and subsequent 10-day observation periods without observable effects.

HANDLING PRECAUTIONS

When applied repeatedly to the skin, SKYDROL LD can cause a drying, solvent-like action. For this reason, the following precautions are recommended.

Care should be taken to avoid contact with the eyes. In case of eye contact, flush immediately with large volumes of water. If irritation persists, consult a physician.

Repeated or prolonged skin contact with SKYDROL LD should be avoided. Special precautions should be taken to avoid contact with cuts and abraded skin. In case of skin contact, wash affected area thoroughly with soap and water.

SKYDROL LD has a low vapor pressure at room temperature and it is not expected to present a significant vapor inhalation hazard under ambient conditions. However, precautions should be observed to avoid inhalation of increased vapor concentrations which may occur if SKYDROL LD is used at elevated temperatures.

SKYDROL LD appears to possess no other acute toxicologic properties which would require special handling other than the good hygienic practices employed with any industrial chemical.

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The above information is based upon studies conducted for Monsanto Company. It is believed to be correct, and it is supplied to others upon the condition that the persons receiving it shall make their own determination of its suitability for their purposes. No warranty is expressed or implied regarding the accuracy of this information or the results to be obtained from its use.

Inquiries regarding this information are to be referred to the Department of Medicine & Environmental Health, 800 N. Lindbergh, St. Louis, Mo. 63166, (314) 694-1000.